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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/608,597

06/27/2003

Erik Busking

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7590

07/18/2006

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EXAMINER

TRAN, TUAN A

ART UNIT

PAPER NUMBER

2618

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/608,597	Applicant(s) BUSKING, ERIK	
	Examiner Tuan A. Tran	Art Unit 2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornak et al. (5,678,222) in view of Lindqvist et al. (5,530,929).

Regarding claim 1, Hornak discloses a communication system (a receiver) with variable filter bandwidth (See figs. 12, 18) comprising: a first mixer circuit 123, 127, 133 disposed within a high frequency integrated circuit having input ports configured to receive a first communication signal and shift the frequency range of the first communication signal to a first frequency range; a second mixer 123, 127 disposed within the high frequency integrated circuit having input ports configured to receive the first communication signal and shift the frequency range of the first communication signal to a second frequency range; an activation circuit 129, 135 coupled to the first and second mixer circuits so as to provide an activation signal that selectively activates any one of the mixer circuits; first and second filter circuits 205, 207 each configured to receive a signal from the first and second mixer circuits, when a corresponding one of the mixer circuits is activated and to provide a signal to a low frequency integrated circuit; and wherein when one of the mixer circuits is activated, the remaining mixer

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circuit does not generate an output voltage signal (See figs. 5A, 12, 18 and col. 9 lines 36-65, col. 12 lines 29-64, col. 18 line 44 to col. 19 line 10). However, Hornak does not mention that an amplifier coupled to the first and second mixer circuits for providing the first communication signal to the first and second mixer circuits. Since receiver having an amplifier coupled to a mixer circuit for providing amplified communication signal to the mixer circuit is common in the art as shown by Lindqvist (See fig. 2); therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Lindqvist in configuring the system, as disclosed by Hornak, with an amplifier coupling to the mixer circuits for the advantage of improving the sensitivity of the system.

Claim 6 is rejected for the same reasons as set forth in claim 1, as method.

Regarding claim 2, Hornak & Lindqvist disclose as cited in claim 1. Hornak further discloses the first and second frequency ranges are substantially the same (See col. 9 lines 62-65).

Claim 7 is rejected for the same reasons as set forth in claim 2, as method.

Regarding claims 3-4, Hornak & Lindqvist disclose as cited in claim 1. Hornak further discloses the filter circuits are bandpass filters wherein the frequency characteristics of the bandpass filters are different from each other (See col. 9 lines 62-65, col. 18 lines 60-63).

Claim 8 is rejected for the same reasons as set forth in claim 3, as method.

Regarding claim 5, Hornak & Lindqvist disclose as cited in claim 1. Hornak further discloses the termination impedance of the output stage of each of the mixer

circuits substantially matches the termination impedance of the input stage of each one of the bandpass filters (See col. 19 lines 3-7).

Claim 9 is rejected for the same reasons as set forth in claim 5, as method.

Response to Arguments

Applicant's arguments filed 05/10/2006 have been fully considered but they are not persuasive.

The Applicant argued that Hornak and Lindqvist, alone or in combination, do not disclose or suggest that "when one of the mixer circuits is activated, the remaining mixer circuit does not generate an output voltage signal" (See Remark, pages 2-3). The Examiner respectfully disagrees with the Applicant's argument because Hornak does clearly show a first **mixer circuit** {123, 127, 133} and a second **mixer circuit** {123, 127}, wherein when one of the mixer circuits is activated (selectively activating by an activation circuit {129, 135}), the remaining mixer circuit does not generate an output voltage signal (See figs. 12 and 18). Hornak, for that reason, perfectly reads on the claimed subject matters; therefore, the rejections are proper and stand for all the pending claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Tran whose telephone number is (571) 272-7858. The examiner can normally be reached on Mon-Fri, 10:00AM-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Tuan Tran


Matthew D. Anderson
SPE - 2618